

PERMYAKOV, I. G.

Subject : USSR/Mining AID P - 3057
Card 1/1 Pub. 78 - 11/20
Authors : Mirchink, M., A. Mustafinov, G. Maksimovich and I. Zubov
Title : In connection with the article of I. G. Permyakov
Periodical : Neft. khoz., v. 33, no. 8, 48-49, Ag 1955
Abstract : The authors make critical remarks concerning the article of I. G. Permyakov "Control of the flooding process of a pool outside its boundaries in the oil recovery of large petroliferous areas of the terrace type under conditions of uneven oil strata", published in this journal, #4, 1955. They do not agree with some of Permyakov's recommendations.
Institution : None
Submitted : No date

PERMYAKOV, I.G.

Graphic method for processing oil field data from tests of wells being exploited at well-bottom pressures below the saturation pressure. Trudy UFNII no.2:178-205 '57. (MIRA 12:1)
(Petroleum engineering)

KRYLOV, A.P.; MAKSIMOV, N.I.; BAYRAK, K.A.; PERMYAKOV, I.G.

Measures for improving the production system in the Tuymazy
oil field. Neft.khoz. 37 no.2:44-50 P '59. (MIRA 12:4)
(Tuymazy region--Oil fields--Production methods)

FERMYAKOV, Il'ya Grigor'yevich; SATTAROV, Maksum Murtazovich; GENKIN,
Izrail' Berisovich. Prinimal uchastiye PANOVА, R.K.; SAVINA,
Z.A., ved. red.; POLOSIKA, A.S., tekhn. red.

[Methodology of analyzing the development of oil fields] Meto-
dika analiza razrabotki neftianykh mestorozhdonii. Moskva, Gos-
toptekhnizdat, 1962. 358 p. (MIRA 15:10)
(Oil reservoir engineering)

PERBYAKOV, I.G.; GUDOK, N.S.

Practicability of the development of oil fields at high rates
of oil recovery. Neft. khoz. 39 no.6:33-38 Je '61. (MIRA 14:8)
(Oil fields--Production methods)

PERMYAKOV, L.I., inzh.

Some peculiarities of design of dry docks built or started from
1950 to 1956 in foreign countries. Sudostroenie 23 no.12:60-63
D '57. (MIRA 11:2)
(Dry docks) (Piling (Civil engineering))

L 12846-63

EWF(q)/EWT(m)/BDS

AFFTC/ASD

JD/JG

s/0133/63/000/005/0422/0425 76

ACCESSION NR: AP3001467

AUTHOR: Yavovskiy, V. I. (Dr. of technical sciences); Matevosyan, P. A. (Engineer)
Kryakovskiy, Yu. V. (Candidate of technical sciences); Tyurin, Ye. I. (Candidate
of technical sciences); Vishkarev, A. F. (Candidate of technical sciences);
Permyakov, L. N. (Engineer); Antipov, K. I., (Engineer)

TITLE: Use of rare-earth elements in smelting of structural alloy steel and of
stainless steel 27

SOURCE: Stal', no. 5, 1963, 422-425

TOPIC TAGS: Ce, La, Nd, Pr, Ni, Armco-iron, steel Kh23N18, steel KhGSA, steel
1Kh18N9T, steel 1Kh1MF, steel 40Kh, flake formation, steel 37KhS, steel 36G2S,
steel 30KhSA

ABSTRACT: The influence of rare-earth elements on properties of different kinds
of steel was investigated at Moskovskiy institut stali i splavov (Moscow
Institute of Steel and Alloys). Ce, La, Nd, and Pr were used separately in
the form of an alloy (45-55% Ce, up to 28% La, and up to 15% Nd). Laboratory
tests indicated that Ce and La lowered the surface tension of molten steel.

Cord 1/2

L 12846-63
ACCESSION NR: AP3001467

15

It was shown that rare-earth elements used in metallurgy (up to 0.3%) do not change the concentration of hydrogen dissolved in molten steel. These elements formed stable nitrides and had a deoxidizing and desulfurizing effect on Armco-iron, on steel Kh23N18, and on steel 30KhGSA. The steel smelted with rare-earth elements was twice as tough as without them. The aftercharge of rare-earth elements improved the elasticity of stainless steel Kh23N18 and reduced the total amount of nonmetallic impurities. Moreover, 1% of Ni was saved, without any loss of elasticity, when rare-earths were added in making the steel 1Kh18N9T, while the addition of rare-earths to a number of structural alloy steels (30KhGSA, 12Kh1MF, 40Kh) improved their elasticity. An addition of up to 1.5 kg/t of rare-earths reduced but did not eliminate the formation of flakes in steel 37KhS, 36G2S, and 30KhSA. However, adding up to 2.7-2.8 kg/t—the formation of flakes/was completely eliminated. "The melts were made with the assistance of M. N. Kul'kova, B. S. Petrov, M. P. Lapshova, G. D. Shurygin, V. A. Grigor'yev, B. N. Okorkov, A. M. Yakushev, P. N. Balashov, G. R. Opanovich, and others." Orig. art. has: 2 figures and 5 tables.

Card 2/2

PRIMYAKOV, N. N., Moscow; KRYAKOVSKIY, T. V., (Moscow); V. L. RAKOV, et al.
Moscow; Moscow; Moscow; Moscow; Moscow

Effect of rare-earth metals on the behavior of nitrogen
in liquid iron and steel. Izv. AN SSSR. Metallurg., dek.
no. 4, p. 72-75, 1964. (MIA 12-1)

YAVOVSKIY, V.I., doktor tekhn.nauk; MATEVOSYAN, P.A., inzh.; KRYAKOVSKIY,
Yu.V., kand.tekhn.nauk; TYURIN, Ye.I., kand.tekhn.nauk; VISHKAREV,
A.F., kand.tekhn.nauk; PERMYAKOV, L.N., inzh.; ANTIPOV, K.I., inzh.

Using rare-earth elements in the making of structural, alloyed
and stainless steel. Stal' 23 no.5:422-425 My '63. (MIRA 16:5)
(Steel--Electrometallurgy) (Rare-earth metals)

PERMYAKOV, M.

Group of shops for welded elements at the Ural Heavy Machinery
Plant. Na stroy.Ros.4 no.6:3-4 Je '63. (MIRA 16:6)

1. Glavnyy inzhener tresta Uralmashstroy.
(Sverdlovsk--Industrial buildings--Design and construction)

BANDURIN, A.(g.Izhevsk); CHEREZOV, V. (g.Izhevsk); NIKITIN, V.(g.Yaroslavl');
YURTSEV, V.; PERMYAKOV, M.V., inzh.; KOKORIN, V.K., inzh.;
TASHKINOV, V., inzh.-konstruktor; IVLIYEV, V., tekhnik-stroitel'
(pos.Ashukino Moskovskoy obl.); DUBROVIN, B., g.Votkinsk);
GUSAROV, L. (g.Aleksin); SHCHETININ, N.

Advertising board. Izobr. i rats. no. 5:60-61 My '61.
(MIRA 14:5)

1. Glavnij inzh.fabriki "Iskra"/ g. Blagoveshchensk, Amurskaya obl.
(for Yurtsev). 2. Zavod imeni Sergo Ordzhonikidze, konstruktorskoye
byuro, g. Chelyabinsk (for Permyakov, Kokorin). 3. Zamestitel'
glavnogo inzh.Zyryanovskogo svitsovogo kombinata (for Shchetinin).
(Technological innovations)

PERMYAKOV, N.A., doktor med.nauk (Moskva)

Septic complications of cardiac myxoma. Klin.med. 39 no.5:
144-146 My '61. (MIRA 14:5)

1. Iz patologanatomiceskogo otdeleniya (rukoveditel' - prof.
A.B. Smol'yannikov) Nauchno-issledovatel'skogo instituta imeni
N.V. Sklifosovskogo (dir. - zasluzhennyj vrach USSR M.M. Tarasov).
(HEART--TUMORS)

TIMOSHENKO, G.M.; GRUBA, V.I.; LOGVINOV, N.G.; PERMYAKOV, N.G.; SLAVUTSKIY,
S.O.; SHMORIN, M.Ya.

Automation of technological processes in hydraulic mining. Ugol'
39 no. 9:37-42 S '64. ("IPA 12:10")

1. Donetskiy politekhnicheskiy institut (for Timoshenko, Gruba,
Logvinov). 2. Ukrainskiy nauchno-issledovatel'skiy institut gidro-
dobychi uglya (for Permyakov). 3. Gosudarstvennyy proyektno-kon-
struktorskiy institut avtomatizatsii rabot v ugol'noy promyshle-
nosti (for Slavutskiy). 4. Vsesoyuznyy nauchno-issledovatel'skiy
i proyektno-konstruktorskiy institut dobychi uglya givravicheskim
sposobom (for Shmorin).

DIK, Ya.G.; RAKHUTIN, S.Ya.; PERMYAKOV, N.I.

Using models to investigate the performance of rod bolting.
Nauch. trudy KNIKI no.14,298-306 '64. (MIRA 18x4)

PERMYAKOV, N.F. PERMYAKOVA, T.M. (Moskva)

Pathological anatomy of aplastochorasis. Arkh. pat. 27 no. 2-73.
81-86. (MIRA 18:10)

I. Pathologicheskij otdel (zav. - doktor med.nauk N.F.
Permyakov) Moskovskogo gosudarstvennogo ordena Trudovogo Krasnogo
Znameni nauchno-issledovatel'skogo Instituta skoroy pomoshchi imeni
Sklifsova (d.r. M.M. Tarusov).

TSIRUL'NIKOV, M.S.; PERMYAKOV, N.K.; VORONKIN, G.V.

Effect of prolonged administration of estrogenic preparations on
the development of cancer of the corpus uteri. Sov. med. 27 no.3:
82-84 Mr '64. (MIRA 17:11)

1. Ginekologicheskaya klinika (ispolnyayushchiy otyazannosti ruko-
voditelya - kand. med. nauk N.K. Permyakov) Instituta skoroy pomo-
shchi imeni Sklifosovskogo (glavnyy khirurg - chlen-korrespondent
AMN SSSR zasluzhennyy deyatel' nauki prof. B.A. Petrov, dir. -
zasluzhennyy vrach UkrSSR M.M. Tarasov.

PERMYAKOV, N.V. (Moskva)

Postabortion septicemia [with summary in English]. Arkn.pat. 20
no.4:31-39 '58. (MIRA 11:5)

1. Iz natalogoanatomiceskogo otdeleniya (zav.-prof. A.V.
Smol'yannikov) Instituta imeni Sklifosovskogo (dir.-zasluzhennyj
vrach USSR M.M. Tarasov)

(ABORTION, complications

post-abortion septicemia, pathol. & bacteriol. aspects (Rus)
(SEPTICEMIA AND BACTEREMIA,

post-abortion septicemia, pathol. & bacteriol. aspects (Rus)

PERMIAKOV, N.K.

Atypical hypernephroid tumors of the kidneys. Urologia, 23
no.1:57-59 Ja-J '58. (MIRA 11:3)

1. Iz Moskovskogo gorodskogo nauchno-issledovatel'skogo instituta
skoroy pomoshchi imeni N.V.Sklifosovskogo (dir.-zasluzhennyj vrach
USSR M.M.Tarasov, zav. patologoanatomicheskim otdeleniyem-prof.

A.V.Smol'yannikov)

(KIDNEYS, neoplasms
adenomatous hypernephroma)

PERMYAKOV, N. K. (Moskva)

Case of isolated melorheostosis of the tibia. Arkh. pat. no.12:
77-79 '61. (MIRA 15:7)

1. Iz patologoanatomiceskogo otdela (rukovoditel' - prof. A. V. Smol'yannikov) Moskovskogo nauchno-issledovatel'skogo instituta imeni Sklifosovskogo (dir. - zasluzhennyj vrach UkrSSR M. M. Tarasov)

(OSTEOSCLEROSIS) (TIBIA--DISEASES)

BRUMBERG, A.S., prof.; VAKHURKINA, A.M.; VINOGRADOVA, T.P., prof.;
LAVRISHCHEVA, G.I., kand. med. nauk; PETYAKOV, N.K., doktor
med. nauk; SHOL'YANNIKOV, A.V., prof.; STRUKOV, A.I., prof.;
otv. red.; DVIZHKOV, P.P., prof., zamestitel' otv. red.;
APATENKO, A.K., kand. med. nauk; SENCHILO, K.K., tekhn. red.

[Multivolume manual on pathological anatomy] Mnogotomnoe ruko-
vodstvo po patologicheskoi anatomii. Otv. red. A.I. Strukov.
Moskva, Medgiz. Vol.6. [Pathological anatomy of diseases of the
osteoarticular system, muscles, and tendons] Patologicheskaya
anatomia boleznei kostno-sustavnoi sistemy, myshts i sukh-
zhilii. Red. toma T.P. Vinogradova. 1962. 518 p. (MIRA 15:4)

1. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for
Strukov).

(BONES—DISEASES) (JOINTS—DISEASES) (MUSCLES—DISEASES)

PARNIakov, N.K., kand.med.nauk (Moskva)

Septic endocarditis following abortion; concerning some concepts
of the pathogenesis of protracted septic endocarditis. Klin.med.
36 no.1:111-116 Ja '58. (MIRA 11:3)

1. Iz patologicheskogo otdeleniya (zav.-prof. A.V.Smol'yannikov)
Nauchno-issledovatel'skogo instituta skoroy pomoshchi imeni Sklifo-
sovskogo (dir.-sasluzhennyj vrach USSR M.M.Tarasov).

(ABORTION, compl.

postabortal septic endocarditis (Rus)

(ENDOCARDITIS, BACTERIAL, etiol. & pathogen.

postabortal sepsis (Rus)

.. PERMYAKOV, N K
EXCERPTA MEDICA Sec 10 Vol 12/5 Obstetrics May 59

697. POSTABORTIVE SEPTICAEMIA (Russian text) - Permiakov N. K. -
ARKH. PATOL. 1958, 20/4 (31-39) Tables 1 Illus. 1

At the Sklifosovskii Pathological Institute in the last 15 yr. 2,500 autopsies have been carried out in women who had died from the consequences of criminal abortion. Clinical and bacteriological examination revealed that septicaemia after abortion is not a generalized infection but a toxic-absorptive process, brought about by necrosis and putrefaction of abortion residues. This process may also precede septic pyaemia. The agents of postabortal sepsis are anaerobic and aerobic putrefactive bacteria (B. perfringens, B. coli, B. tetanomorphum, B. paracoli etc.) in various combinations. Severe cases of infection by haemolytic streptococci and staphylococci always showed bacterial deposits in various organs, even when the disease was of short duration (2 to 3 days).

Brandt - Berlin (V, 10)

PERMYAKOV, N.K.; SUSLOV, A.M.

Conferences on clinical anatomy held by the Sklifosovskii Municipal Research Institute in Moscow during the period 1953-1956 and some data on the coincidence of clinical and anatomical diagnoses.
Arkh.pat. 20 no.4:89-95 '58. (MIRA 11:5)
(DIAGNOSIS)

PREMYAKOV, N.K., kandidat meditsinskikh nauk

Unusual complications of suppurative appendicitis. Khirurgia 33
no.2:117-120 F '57. (MLRA 10:6)

1. Iz patologoanatomiceskogo otdela (zav. - prof. A.V.Rusakov
[deceased]) Moskovskogo gorodskogo nauchno-issledovatel'skogo
instituta (dir. - zasluzhennyy vrach USSR M.M.Tarasov) skoroy
pomoshchi imeni Sklifosovskogo ..
(APPENDICITIS, compl.
unusual, in suppurative appendicitis (Rus))

PERNIKOV, N.K., kandidat meditsinskikh nauk

Some peculiarities of septic endocarditis following abortion and
its treatment with antibiotics. Sov.med. 21 no.1:50-54 Ja '57.
(MLRA 10:6)

1. Iz patologoanatomiceskogo otdela (zav. - prof. A.V.Smol'yannikov)
Moskovskogo gorodskogo nauchno-issledovat el'skogo instituta skoroy
pomoshchi imeni Sklifosovskogo (dir.-zasluzhennyj vrach USSR M.N.Tarasov)

(ABORTION, compl.

septic endocarditis, antibiotic ther.)

(ENDOCARDITIS, BACTERIAL, etiol. and pathogen.

septic endocarditis caused by abortion, antibiotic ther.)

(ANTIBIOTICS, ther. use

septic endocarditis, caused by abortion)

PERMYAKOV, N. K.

"Changes in the Kidneys During Hemolysis." Sub 18 Jun 51, First Moscow
Order of Lenin Medical Inst.

Dissertations presented for science and engineering degrees in Moscow
during 1951.

SC: Sum. No. 480, 9 May 55.

ENOL'YANNIKOV, A.V., prof.; NADACHINA, T.A., doktor; PIRMYAKOV, N.K.,
doktor med. nauk

Clinical anatomical characteristics of acute surgical diseases
of the abdominal cavity in elderly persons, based on materials
of the Sklionskiy Institute. Trudy Inst. Im. N.V. Sklionskogo;
13-19 '63.
(MIRA 19:6)

PERMYAKOV, N. K., Doc of Med Sci -- (diss) "General Purulent Infection
Following an Abortion," Moscow, 1959, 26 pp (1st Moscow Medical Inst
im Sechenov) (KL, 6-60, 124)

Priemnye tekhnika

BLINOVA, V.N.; DEMIDOV, A.A.; KOLIN, Ye.S.; MAKUSHKIN, Ye.G.; MYZIN, L.M.;
PERMYAKOV, N.P.; PONEDILKO, A.I.; BOROVIK, Z.G.; YEFREMOV, I.A.;
KOPAYGORODSKIY, A.B.; MARINOV, A.M.; NEKHOROSHKOVA, O.I.; POKROVSKIY,
A.P.; ROMANOVSKIY, A.A.; RASSADNIKOV, Ye.I., red.; SAVEL'YEV, V.I.,
red.; FRIIDKIN, A.M., tekhn.red.

[Electric power in the Urals during the past 40 years] Energetika
Urala za 40 let. Moskva, Gos. energ. izd-vo, 1958. 141 p.

(MIRA 11:5)

(Ural Mountain region--Electric power)

KOROLEV, V.I.; MAKARYCHEV, Yu.K.; MEL'NIKOVA, V.A.; PERMYAKOV, N.V.

Instrument for recording rolling angles, angular velocities and accelerations. Izv.vys.ucheb.zav.; prib. 4 no.3:75-82 '61.
(MIRA 14:6)

1. Issledovatel'skiy fiziko-tehnicheskiy institut Gor'kovskogo gosudarstvennogo universiteta imeni N.I. Lobachevskogo. Rekomendovana Gor'kovskim issledovatel'skim fiziko-tehnicheskim institutom.

(Nautical instruments)

PERMYAKOV, N.V.

Locating leaks in laying pipelines through large reservoirs. Stroi.
truboprov. 9 no.1:17-19 Ja '64. (MIRA 17:3)

1. Otryad No.3 Podvodrochastroya.

PERMIKOV, N.V.

Running pipelines under the ice in the construction of crossings
in the winter. Stroi. truboprov. 9 no.8:22-24 Ag '64.
(MIRA 17:12)

1. Otryad No.3 Podvodrechstroya.

13,2530

28959
S/146/61/004/003/008/013
D217/D301

AUTHORS: Korolev, V.I., Makarychev, Yu.K., Mel'nikov, V.A.,
and Permyakov, N.V.

TITLE: An instrument for recording the angles of roll and
pitch angular velocities and accelerations

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priboro-
stroyeniye, v. 4, no. 3, 1961, 75 - 82

TEXT: The author describe an instrument used for registering both
the roll and trim of ship angles. The system consists of a gyro-
scopic element producing the input coordinate angle $\phi(t)$ connected
to series-connected summing device, amplifier, servomotor, stylus
carriage with the position feedback loop between the stylus carria-
ge and adder. The sensing element is the vertical reference gyro
АГИ-1 (AGI-1) or АК-6М (DK-6M). Linear wire pick-ups fixed at the
axes of the gimbals serve as transducers. The voltage from the
pick-ups is added to the feedback signal and the signal error is

Card 1/4

28959
8/146/61/004/000/008/013
D217/D301

An instrument for recording ...

EYN -53 (EUP-53) are used. The zero-set level with input signal equal to zero is obtained by changing the voltage of one of the output valves. The instrument is moduli-built and consists of the following main blocs: 1) Gyroscopic angle pick-up; 2) Gyrosopic velocity pick-up; 3) Amplifiers; 4) Spooling mechanism and time marker; 5) Power supplies. The basic technical specification of the instrument is as follows: 1. Range of frequencies reproduced without distortion for roll and trim 0 to 1.2 c/s; 2. Maximum angles: roll $\pm 40^\circ$; trim $\pm 120^\circ$ (when using DK-6M as sensing elements both angles go up to $\pm 60^\circ$). 3. Maximum stylus deflection; 60 mm for roll and 40 mm for trim. 4. Accuracy of recording on paper tape for roll and ships 0-10 $^\circ$. 5. Range of measurements of angular velocities, roll, ships 0-40 deg/sec, models 0-200 deg/sec, trim, ships 0-20 deg/sec, models 0-100 deg/sec. 6. The range of measurements of angular accelerations, roll, ships 0-40 deg/sec², models 0-8000 deg/sec², trim, ships 0-40 deg/sec², models 0-800 deg/sec². 7. Time marker intervals on paper tape 0.5 sec. 1 sec. 2 sec. with accuracy 1 %. 8. Speed of feed of paper tape at recording: 2 mm/sec, 4 mm/sec, 8 mm/sec.

Card 8/4

An instrument for recording ...

S/146/61/004/003/008/013
D217/D301

sec. 9. Power supply d.c. mains 27 V. and a.c. mains 127-220 V. 10. Dimensions of the instrument 630 x 420 x 350 mm. 11. Weight without the power supplies does not exceed 20 kg. There are 6 figures and 1 Soviet-bloc reference.

ASSOCIATION: Issledovatel'skiy, fiziko-tehnicheskiy institut Gor'kovskogo gosudarstvennogo universiteta im. N.I. Lobachevskogo Rekomendivana GIFTL (Physics and Technology Research Institute of the Gor'kiy State University im. L.I. Lobachevskiy. Recommended by GIFTL)

SUBMITTED: December 14, 1960

Card 4/4

PERMYAKOV, N.V.

Simultaneous laying of three crossings over a reservoir. Strei.
truboprov. 9 no.4:2 -30 Ap '62. (..... 17: ..)

1. Otryai No.3 i obivorechstroya.

PERMYAKOV, O., insh.

The "423-Moskvich" automobile can be used as a taxicab. Avt. transp.
36 no. 4:31 Ap '58. (MIRA 11:4)

(Taxicabs)

PERMYAKOV, O.

Changing the method of using official autobuses. Avt.transp.32
no:10:31 0 '54. (MLRA 7:12)
(Motor buses)

SEMANOV, I. (g.Leningrad); PERMYAKOV, O. (g.Minsk); DOMCHENKO, N. (g.Reutovo)

Readers about the "Highway atlas of the U.S.S.R." Za rul. 18
no.5:31 My '60. (MIRA 14:3)
(Road maps)

PERMYAKOV, P.G.

Dust problem in the ore dressing plant of the Yaroslav Mining
Combine. Gor. zhur. no.2:68-69 F '61. (MIRA 14:4)

1. Nachal'nik Obogatitel'noy fabriki Yaroslavskogo gorno-obogati-
tel'nogo kombinata.
(Dust—Prevention) (Yaroslavl—Ore dressing)

PERMYAKOV, P.N.; CHEKANOV, A.N.; SHEVALDIN, G.P.

Expediency of the over-all mechanization of stoping operations
in mines under the Tula Economic Council. Ugol' 37 no.8:
36-40 Ag '62. (MIRA 15:9)

1. Tul'skiy kombinat ugol'noy promyshlennosti Podmoskovnogo
basseyna Ministerstva ugol'noy promyshlennosti SSSR.
(Tula Basin--Coal mines and mining) (Coal mining machinery)

PEROMAKOV, P.N.

Engineering difficulties of the Tula Coal Combine. Mekh.trud.rab.
9 no.10:6-7 0 '55. (MLRA 9:1)

1. Glavnyy inzhener kombinata Tulaugol'.
(Tula Province--Coal mines and mining)

KURBATSKIY, O.M., kand. tekhn. nauk; IVANOV, Ye.N., inzh.;
PERMYAKOV, P.N., inzh.

Efficient hydrant for rural water conduits. Gidr. i mel. 15
no.12:54-55 D '63. (MIRA 17:2)

1. TSentral'nyy nauchno-issledovatel'skiy institut protivo-
pozharnoy oborony.

25(5)

SOV/118-59-2-3/26

AUTHOR: Permyakov, P.N., Chief Engineer

TITLE: The Development of Complex Mechanization and Automation in Mines of the "Tulaugol'" Combine (Puti razvitiya kompleksnoy mekhanizatsii i avtomatizatsii na shakhtakh kombinata "Tulaugol'")

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, 1959, Nr 2, pp 12-15 (USSR)

ABSTRACT: During recent years the mines of the Kombinat "Tulaugol'" (the "Tulaugol'" Combine) have done considerable work in utilizing modern mining techniques and introducing new efficient machines and mechanisms, for instance the modernized "Donbass" combine with the conveyer KS-2 and the metal support of VKSh-2 type. There have been tested new coal mining combines (K-14, K-14 G, K-56, and K-57), drifting combines (PK-3 and PK-38), coal loading machines (GNL-50 and GND-30), scraper conveyers, mechanized supports, the A-3 extracting combine and also some machines for the drying

Card 1/4

SCV/118-50-2-3/76

The Development of Complex Mechanization and Automation in Mines of
the "Tulaugol" Combine

of mines. Many automation and remote control systems have been developed. Giprouglemash has developed a narrow-grip combine (K-58-M) with a drum cutting device, the KU-57 (with a contour bar) and the KU-60. The amount of coal loading mechanization has increased from 4.2 in 1955, to 21% in 1958. During the same period the amount of coal mined by drifting combines has risen from 16.3 to 24.4% of total production, but on the whole the standard of mechanization and automation is still unsatisfactory. Every 1,000 tons of extracted coal requires 647 workers; 79 % of them in underground and 21 % in surface operations (47% are still manual labor). Since 1955 the highly efficient "Donbass-1" combines and the KS-2 conveyer belts are being widely used (from 1956 to 1958 the number of "Donbass" combines increased from 64 to 188). The author mentions displaceable mechanized metal supports of the "Mosbass"

Card 2/4

SOV/118-59-2-3/26

The Development of Complex Mechanization and Automation in Mines of
the "Tulaugol," Combine

type (successfully tested at the "Kalininugol," trust),
hydraulic mechanized supports of the M-81 type (enabling
a stoping advance of almost 7m in 24 hours), a special
caving-in winch with remote control, a projected small
size 4-ton electric locomotive and a self-propelled
mine car (capacity - 6 tons). It is planned to intro-
duce by 1965 complex mechanization and automation in
50% of the "Tulaugol," mines, and to increase the amount
of loading mechanization up to 43%. The main role in
realizing the mechanization and automation in coal
mining belongs to the scientific research and projects
institutes and particularly to the Podmoskovnyy nauchno-
issledovatel'skiy institut (Scientific Research Insti-
tute of the Moscow Area), the Proyektno-konstruktorskiy

Card 3/4.

PERMYAKOV, P.N.

Practices in designing and introducing movable stope supports for
mines under the Tula Economic Council. Ugol' 34 no.11:5-13 N '59
(MIRA 13:3)

1. Glavnnyy inzhener kombinata Tulaugol'.
(Tula Basin--Mine timbering)

PESEMYAKOV, P.N., laureat Leninskoy premii

Over-all mechanization and automation in the mines under Tula Economic Council. Ugol' 37 no.2:i-9 P '62. (MIRA 15:2)

1. Glavnyy inzh. kombinata Tulaugol'.
(Tula Basin--Coal mines and mining)

PERMYAKOV, P.K., kand. tekhn.nauk, Izvest. vuzovskoy chemii

Analysis of the operation of mechanized complexes and supports
in the Moscow Basin and their improvement. Ugol' 40
no.1:53-64 Ja '55. (MIRA 18:4)

1. Glavnyy zhsh. kombinata 'Ugropoly'.

SUBROTIN, A.A., Geroy Sotsialisticheskogo Truda; PERMYAKOV, P.N.,
laureat Leninskoy premii; NECHIPORENKO, M.M.; DOLOTOV, N.P.

Mechanization and automation in mines of the Priokskiy Economic
Council. Bezop. ruda v prom. 7 no.4:2-3 Ap '63.
(MIRA 16:4)

1. Nachal'nik Tul'skogo kombinata ugol'noy promyshlennosti
Podmoskovnogo basseyna Ministerstva ugol'noy promyshlennosti
SSSR (for Subbotin). 2. Glavnyy inzh. Tul'skogo kombinata
ugol'noy promyshlennosti Podmoskovnogo basseyna Ministerstva
ugol'noy promyshlennosti SSSR (for Permyakov). 3. Nachal'nik
Upravleniya Tul'skogo okruga Gosudarstvennogo komiteta pri
Sovete Ministrrov RSFSR po nadzoru za bezopasnym vedeniyem rabot
v promyshlennosti i gornomu nadzoru (for Nechiporenko). 4. Glav-
nyy inzh. Upravleniya Tul'skogo okruga Gosudarstvennogo komiteta
pri Sovete Ministrrov RSFSR po nadzoru za bezopasnym vedeniyem
rabot v promyshlennosti i gornomu nadzoru (for Dolotov).

(Tula Province—Coal mines and mining)
(Automation)

PERMYAKOV, P.N., inzh.

Over-all mechanization of stoping in mines of the Tula Economic
Council. Mekh.i avtom.proizv. 16 no.9:36-37 S '62.
(MIRA 15:9)
(Tula Province--Mining machinery)

NECHIPORENKO, M.M.; DOLTOV, N.P., inzh.; SUBBOTIN, A.A., Geroy Sotsialisticheskogo truda; PERMYAKOV, P.N., laureat Leninskoy premii

Effective methods for improving work sanitation in mining. Bezop.truda v prom. 6 no.7:4-6 Jl '62. (MIRA 15:7)

1. Nachal'nik Upravleniya Tul'skogo okruga Gosudarstvennogo komiteta pri Sovete Ministrov RSFSR po nadzoru za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru (for Nechiporenko). 2. Nachal'nik Tul'skogo kombinata ugol'noy promyshlennosti Podmoskovskogo basseyna Ministerstva ugol'noy promyshlennosti SSSR (for Subbotin). 3. Glavnnyy inzh. Tul'skogo kombinata ugol'noy promyshlennosti Podmoskovskogo basseyna Ministerstva ugol'noy promyshlennosti SSSR (for Permyakov).
(Tula Province--Coal mines and mining--Safety measures)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240110012-9

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240110012-9"

SHUMKOV, N.P., gornyy inzh.; PERMYAKOV, R.S., kand. tekhn. nauk; KULESHOV,
A.A., gornyy inzh.

Experience in the combined system of mining the "Apatitovyi tsirk"
deposit. Gor. zhur. no.6:38-39 Je '65. (MIRA 18;7)

1. Murmanskij sovet narodnogo khozyaystva (for Shumkov). 2. Kombinat
"Apatit" (for Kuleshov).

ARSENT'YEV, A.I., kand. tekhn. nauk; FERMYAKOV, R.S.; BORKO, I.A.,
student; SANDOMIRSKIY, K.Ya., student; SHAPTEKIN, A.V., student

Expansion of mining operations at the Olenogorsk strip mine
using multiple-row blasting. Sber. nauch. trud. KGR1 no.15:
60-63 '63. (MIRA 17:8)

1. Nachal'nik Olenegorskogo kar'era, Krivorechskiy basseyn
(for Fermyakov).

OSAULENKO, P.I., gorny inzh.; ROZINOVER, B.L., gorny inzh.; PERMYAKOV, R.S.,
gorny inzh.

Breaking of ore in deep holes without corresponding free space.
Gor. zhur. no.4:9-11 Ap '60. (MIRA 14:6)

1. Kombinat Apatit, Kirovsk, Murmanskoy obl.
(Mining engineering)

PERMYAKOV, R.S.

Practice of multirow short-delay blasting in the Olenegorsk
open-pit mine. Gor. zhur. no.1:44-45 Ja '62. (MIRA 15:7)

1. Nachal'nik Olenegorskogo rudnika.
(Olenegorsk region—Blasting)

GRINBERG, I.N., gornyy inzhener; PERMYAKOV, R.S., gornyy inzhener;
CHEREPAKOV, G.S., gornyy inzhener

Improving blasting operations in pits of the Olenegorsk Mining
Administration. Vzryv. delo no.47/4:84-89 '61. (MIRA 1:2)

1. Olenegorskoye rudoupravleniye (for Grinberg, Permyakov).
2. Institut gornogo dela imeni A.A.Skochinskogo AN SSSR (for Cherepanov).

(Olenegorsk region--Blasting) (Boring)

SEMELEV, P.K.; PERMYAKOV, R.S.; GRINBERG, I.N.; APKHANOV, Yu.G.;
FEDOSEYEV, B.A.; KOLESNIKOVA, V.M., inzh., spets. red.;
GLADKOV, V.A., red.; SYCHEVA, V.A., tekhn. red.

[Improving boring and blasting operations at the Olenegorsk
Mine] Sovremenstvovanie burovzryvnykh rabot na Olenegorskem
rudnike. Murmansk, Murmanskoe knishnoe izd-vo, 1962. 77 p.
(MIRA 16:10)
(Olenegorsk region--Mining engineering)

ARSENT'YEV, A. I., kand. tekhn. nauk; NIKOLAYEV, L. A., gornyy inzh.;
PERMYAKOV, R. S., gornyy inzh.

Digging a wide trench in an open pit. Gor. zhur. no.11:75
N '62. (MIRA 15:10)

1. Krivorozhskiy gornorudnyy institut (for Arsent'yev).
2. Olenegorskiy gornoobogatitel'nyy kombinat (for Nikolayev,
Permyakov).

(Strip mining)

BARSUKOV, G.G., inzhener-mekhanik; PERMYAKOV, R.S., gornyy inzh.

Using the D-384 bulldozer in the Olenegorsk open-pit mine. Ser.
zhur. no. 3147-48 Mr '63. "MIRA 1654"

1. Olenegorskiy goznoobogatitel'nyy kombinat.

PERMYAKOV, R.S.

Growth of mining operations in working the mountainous part of the
Olenegorsk deposit. Gor. zhur. no.11:25-28 N '61. (MIRA 15:2)

1. Nachal'nik Olenegorskogo kar'yeva.
(Olenegorsk region--Iron mines and mining)

YAKOVLEV, O.A.; PERMYAKOV, R.S.

Work practice of miners of the S.M. Kirov apatite mine. Khim.
prom. no.1:50-51 Ja-Y '57. (MLRA 10:4)
(Apatite) (Mining engineering)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240110012-9

PERMYAKOV, R.S.

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240110012-9"

PERMYAKOV, R.S., kand. tekhn. nauk; AKKURATOV, V.N., akademik SSSR, k.k., doktor tekhn. nauk

Experience in the building of an open-cut mine on the Tazymchay Plateau. Gor. zhur. no.10:6-9 C '65. (MIRA 18:11)

1. Gornokhimcheskiy ordena Lenina Kombinat "Apatit" m. o.M. Kirova (for Permyakov, Akkuratov). 2. Keri'skiy filial AN SSSR (for Arsent'yev).

PERMYAKOV, R.S., kand. tekhn. nauk; KULESHOV, A.K., gornyy inzh.;
PAVLENKO, T.I., gornyy inzh.; ARSENT'YEV, A.I., doktor
tekhn. nauk; GVOLENKO, B.K., kand. tekhn. nauk.

Use of deep ore chutes in the apatite open-cut mines. Sov. zhur. no.10:13-16 O '65.

1. Gornokhimicheskiy ordena Lenina kombinat "Apatit" im. N.P. Kirova (for Permyakov, Kuleshev, Pavlenko). 2. Kol'skiy filial AN SSSR (for Arsent'yev, Gvoienko).

PERMYAKOV, R.S., kand. tekhn. nauk, SUKHOODEREV, V.M., fizich. inst.,
GRACHEV, I.G., kand. tekhn. nauk

Roller bit drilling in apatite open-cut mines. Gor. zr.n.
no.10:19-22 O '65. (MERA 18.11)

1. Gornokhimicheskiy ordena Lenina kombinat "Apatit" im. S.M.
Kirova (for Permyakov, Sukhodrev). 2. Gosudarstvennyy nauchno-
issledovatel'skiy institut gornokhimicheskogo sver'ya (for
Grachev).

1. PERMYAKOV, S.; ARIYEVICH, Ye.; CHEREKHOV, K., Eng.
 2. USSR (600)
 4. Ventilation
 7. Ventilation of attics in residential buildings through slotted vents. Zhil. -kons. khoz. 3, No. 2, 1953.
9. Monthly List of Russian Accessions, Library of Congress, April 1953. Unclassified.

PERMYAKOV, S. I., kand. tekhn. nauk

Heat engineering in construction; for standards planning. Proz. stroi.
42 no. 744-47 '65. (MIRA 18:8)

PERMYAKOV, S.I., dotsent, kand.tekhn.nauk

Calculation of ground piles. Nauch.zap. MIIVKH 2.2.2.1.1.1.
(MIR, 1971)
(Piling (Civil engineering))

NIKOL'SKIY, V.N., kand. tekhn. nauk; SPIVAK, N.Ya., kand. tekhn. nauk; BAULIN, D.K., inzh.; BUADZE, V.Sh., inzh.; KREYTAN, V.G., kand. tekhn. nauk; PECHYAKOV, S.I., kand. tekhn. nauk; USOV, A.L., inzh.; KOSHKIN, V.G., kand. tekhn. nauk; MARAVIN, B.L., inzh.; ERENBURG, A.I., inzh.; KOCHESHKOV, V.G., inzh.; RUBANENKO, B.R., glav. red.; ROZANOV, N.P., zam. glav. red.; OUFRIYEV, I.A., red.; YUDIN, Ye.Ya., red.; NASONOV, V.N., red.; ISIDOROV, V.V., red.; MAKARICHEV, V.V., red.; FINKINSHTEYN, B.A., inzh. red.;

[Prefabricated floor and ceiling structures] Poly i perekrytiia industrial'noi konstruktsii. Moskva, Gosstroizdat, 1963. 71 p. (MIRA 16:12).

1. Akademiya stroitel'stva i arkhitektury SSSR. TSentral'nyy nauchno-issledovatel'skiy i eksperimental'no-proyektornyy institut industrial'nykh zhilykh i massovykh kul'turno-bogatykh zdaniy. 2. Nauchno-issledovatel'skiy institut stroitel'noy fiziki i ogranichayushchikh konstruktsii (for Nikol'skiy, Usov). 3. TSentral'nyy nauchno-issledovatel'skiy i eksperimental'no-proyektornyy institut industrial'nykh zhilykh i massovykh kul'turno-bogatykh zdaniy (for Buadze, Baulin, Spivak, Kreytan, Kocheshkov). 4. Vsescyuzhnyy nauchno-issledovatel'skiy institut novykh stroitel'nykh materialov Akademii stroitel'stva i arkhitektury SSSR (for Erenburg).

(Floors) (Ceilings)

TEMKIN, L.Ye., inzh., red.; FERMYAKOV, S.I., kand. tekhn.nauk, red.;
FOKIN, K.F., doktor tekhn.nauk, red.; IL'NSKIY, V.M., kand.
tekhn. nauk, red.; PETROVA, V.V., red. izd-va; KOMAROVSKAYA,
L.A., tekhn. red.

[Construction norms and regulations] Stroitel'nye normy i
pravila. Moskva, Gosstroizdat. Pt.2. Sec.A. ch.7. [Heat
engineering in construction; design specifications] Stroil'-
tel'naya teplotekhnika; normy proektirovaniia (SNiP II-A.
7-62). 1963. 29 p. (MIRA 16:8)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva. 2. Gosudarstvennyy komitet Soveta Ministrov SSSR po delam stroitel'stva (for Temkin). 3. Nauchno-issledovatel'skiy institut stroitel'noy fiziki Akademii stroitel'stva i arkhitektury SSSR (for Permyakov). 4. Nauchno-issledovatel'skiy institut Glavnogo upravleniya po zhilishchnomu i grazhdanskому stroitel'stvu v g. Moskve (for Fokin). 5. Moskovskiy inzhenerno-stroitel'nyy institut im. V.V. Kuybysheva (for Il'inskiy). (Heat engineering)

PERMYAKOV, S.I., kand.tekhn.nauk; TELEGINA, I.A., inzh.

Building large-panel apartment houses out of air-entrained fly-
ash concrete. Trudy NIISF no.1:80-94 '62. (MIRA 15:11)
(Apartment houses) (Lightweight concrete)

PERMYAKOV, S.I., starshiy nauchnyy sotrudnik; MIYEVICH, E.M., starshiy nauchnyy sotrudnik; CHEREKHOV, K.M., starshiy nauchnyy sotrudnik.

Increasing the durability of roof constructions and attic ceilings. Gor.
khoz. Mosk. 27 no.8:16-19 Ag '53. (MLRA 5:8)

1. Akademiya kommunal'nogo khozyaystva imeni K.D.Pamfilova.
(Roof) (Ceilings)

PERMYAKOV, S.I.; ARIYEVICH, E.N.

On the designs and uses of water drainage from sloping and flat
roofs of multistory buildings. Gor. khoz. Mosk. 29 no.7:31-34
Jl '55. (MLRA 8:9)

1. Starshiye nauchnyye sotrudniki Akademii komunal'nogo
khozyaystva imeni K.D.Pamfilova (for Permyakov, Ariyevich)
(Moscow--Drainage, House)

large
M. 1922.
by 1922.

KOBYZEV, N.; PERMYAKOV, V.

When there is no seasonal prevalence in flights. Kryl.tod. 11
no.6:23-24 Je '60. (MIRA 13:?)
(Yaroslavl--Flight training)

ZHEDOV, V., inzh.; GAVRILENKO, V. [Havrylenko, V.], inzh.; POPOV, V., inzh.;
PERMYAKOV, V., inzh.

Experience of the Petrovskii large-panel housing construction. Bud.
mat. i konstr. 4 no.1:14-19 Ja-F '62.
(Donetsk—Precast concrete construction) (MIRA 15:7)

Translation from: Referativnyy zhurnal, Geografiya, 1957, br 2,
p 166 (USSR) 14-57-c-14986

AUTHOR: Fermyakov, V.

TITLE: A History of the Rock Salt Discovery in the Donets Basin (Do istoriyi vidkrytyya pokladiv kam'yanoyi soli v Donets'komu baseyni--in Ukrainian)

PERIODICAL: Narisi z istoriyi tekhn. AN UkrSSR, 1956, br 3,
pp 130-136

ABSTRACT: Salt has been mined in the Donets basin since 1675, and the deposits have been studied since the beginning of the 18th century. The author describes the main scientific investigations and results obtained by them. A bibliography of 15 titles is included.

Card 1/1

PERMYAKOV, V.A., kand. tekhn. nauk; BELOUSOV, M.P., inzh.

Shortcomings of a useful textbook. Teploenergetika 10 no.8,
93-94 Ag '63.
(MIRA 16:8)

(Heat exchangers)

PERMYAKOV, V. A., kand. tekhn. nauk

Aerodynamic study of flues of the TP-20 boiler by means of a
model. Energomashinostroenie 4 no.12:20-23 D 1958.

(Flues)

(MIL 11:12)

PERYAKOV, Vedom.

History of the discovery of sodium chloride deposite in the
Donets Basin. Nar. z ist. tekhn. no.3:130-136 '56. (MLRA 10:6)
(Donets Basin--Salt)

PER MYARD V

Bo

1 - 9

Clays from Shikoku (Soran-Vienna Rly.).
V. PANKOV (Trava. Orm. Nauk. Inst., Rumia, 1929, No. 17, 4-31).—The composition and ceramic properties of the grey or brown coarse grained clays are recorded.

CHEMICAL ABSTRACTS.

PERMYAKOV, Vadim.

Stratigraphy of Lower Jurassic deposits of Digora. Biul. MOIP. Otd.
geol. 29 no.4:51-59 Jl-Ag '54. (MLRA 7:9)

(Digora region--Geology, Stratigraphic) (Geology, Stratigraphic--
Digora region)

OLIKER, I.I., kand. tekhn. nauk; PERMYAKOV, V.A., kand. tekhn. nauk;
BRACH, N.M., inzh.

Operation of a thermal deaerator at atmospheric pressure with
a bubbling system developed by the Central Scientific Research
Institute for Boilers and Turbines. Elek. sta. 36 no.9:5-8 S
'65. (MIRA 18:9)

L 27872-66 ENI(1)/ETC/EPF(n)-2/EWG(m)/EPA(w)-2 IJP(c) AT
ACC NR: AP5026704 SOURCE CODE: UR/0141/65/008/005/0893/0898
AUTHOR: Permyakov, V. A.; Solodukhov, V. V. 14
ORG: Moscow Power Engineering Institute (Moskovskiy energeticheskiy institut) B
TITLE: Surface impedance of a nonhomogeneous plasma with sharply varying parameters
SOURCE: IVUZ. Radiofizika, v. 8, no. 5, 1965, 893-898
TOPIC TAGS: permittivity, inhomogeneous plasma, electric impedance

ABSTRACT: The surface impedance of a plasma as a function of the structure of the incident field, i.e., the spatial dispersion of surface impedance, is considered. It is assumed that the permittivity gradient is a sufficiently large quantity, so that the field in the nonhomogeneous layer may be represented as a series in reciprocal powers of a large parameter. From a physical standpoint, the condition of a large gradient means that the discussion is restricted to a strong skin effect in the inhomogeneous layer. Impedances of a half-space nonhomogeneous along the normal to the surface and of a sphere inhomogeneous along the radius are considered. The incident field in the first problem is given in the form of a plane wave, and in the

Card 1/2

UDC: 533.925

L 27872-66

ACC NR: AP5026704

second problem, in the form of a spherical wave; the two cases of polarization are treated separately. The results obtained permit the solution of various problems of external excitation of nonhomogeneous plasma bodies (such as nonhomogeneous layer or sphere) at large permittivity gradients. The method used to calculate the external field is also used in problems involving excitation of homogeneous bodies, except for the fact that the impedances of homogeneous bodies are replaced by the impedances of the corresponding nonhomogeneous bodies. Orig. art. has: 4 figures and 15 formulas.

SUB CODE: ME/ SUBM DATE: 24Dec64/ ORIG REF: 003/ OTH REF: 000

Card 2/2

BELYAYEV, M.F.; PERMYAKOVA, V.A.

Development of interest in the heroic by secondary school
pupils. Vop.psikhil. 5 no.6:55-61 N.D '59.
(MIRA 13:4)

1. Kafedra pedagogiki i psichologii Irkutskogo pedagogicheskogo
instituta.
(Heroes) (Imitation)

VARSHAVSKIY, T.P.; AGAPOV, B.G.; MUSTAFIN, F.A.; PERMYAKOV, V.A.

Reducing the escape of gas during the charging of coke ovens.
Koks i khim.no.2:26-30 '56.

(MLRA 9:7)

1.Vostochnyy uglekhimicheskiy institut (for Agapov).2.N.-Tagil'skiy
keksekhimicheskiy zaved.
(Coke ovens)

SOV/96-59-8-8/2

AUTHOR: Permyakov, V.A., Candidate of Technical Sciences

TITLE: The Results of Aerodynamical Studies on a Model of an Air Heater for a Boiler Type TP-70

PERIODICAL: Teploenergetika 1959, Nr 8, pp 26-30 (USSR)

ABSTRACT: Many Soviet power stations use tubular air-heaters based on the two-flow arrangement of the All-Union Thermo-Technical Institute. Two variants of air heater considered in the design of a boiler type TP-70 are illustrated in Fig 1. In a number of cases the heaters were not very satisfactory. Data about their performance on various boilers is given in Table 1 and shows that some are obviously defective. It was accordingly decided to study their performance by means of tests on models. The two variants of air heater illustrated in Fig 1 were modelled by the Central Boiler Turbine Institute on a scale of 1:10. Narrow models were used, having only one fifth of the equivalent width of the air heaters. The models were supplied with air from a fan with an output of 2000 cubic metres per hour at a head of 1 metre water. Test results obtained on a model of the first variant of construction are plotted in Fig 2. Tr.

Card 1/4

SOV/96-59 -8-8/27

The Results of Aerodynamical Studies on a Model of an Air Heater for
a Boiler Type TP-70

Card 2/4

formulae used to relate these results to the full scale equipment are given. The results of the comparison are presented in Fig 3 and show that for the first and second air ducts the resistance is in accordance with the design figures. The resistance of the third and fourth air ducts is somewhat above the design figure. The total resistance of the first variant of air heater derived from tests on models is 133 mm of water instead of the 121 mm expected from the design. Experimental and calculated values of the resistance factor for each way of the heater are given in Table 2 and it will be seen that the difference is only about 1.5%. Analysis of the results shows that there must be design or erection defects in some of the heaters and power stations cited in Table 1. The trouble is probably associated with the design and construction of the side boxes: the air flow in these boxes is discussed with reference to Fig 4. The use of guide vanes can be very useful in such cases, but they are not easy to apply to the present constructions. Various forms of air distributor were considered for the upper sections of both variants of air

SOV/96-59-8-8/2"

The Results of Aerodynamical Studies on a Model of an Air Heater for
a Boiler Type TP-70

heater, and sectional diagrams of six forms are given in Fig 5. The results of model tests on them are plotted in Fig 6, from which it will be seen that the grid arrangement of Fig 5e and the air flow distributor illustrated in Fig 5b are the best. Accordingly the use of grids is recommended in both variants of air heater and they are shown dotted in Fig 1. Fig 7 gives the results of tests on models to determine the total resistances of the two variants of air heater. It will be seen that the resistance of the second variant is lower by about 15%. This is to be expected, because its total available section for air flow is greater. As the manufacturer's design data was not obtained the comparison could be related only to the models. Finally, tests were made to study the influence of altering a number of design features of the second variant of air heater. A number of minor recommendations about design Card 3/4 are derived therefrom. The principal changes that are

SOV/96-59-8-8/27

The Results of Aerodynamical Studies on a Model of an Air Heater for
a Boiler Type TP-70

required in existing designs of air heater to improve their
performance are summarised. There are 7 figures, 2 tables
and 3 Soviet references.

ASSOCIATION: Tsentral'nyy kotloturbinnyy institut (The Central
Boiler Turbine Institute)

Card 4/4

ACCESSION NR: AP4042916

S/0057/64/034/008/1341/1344

AUTHOR: Vasil'yev, Ye.N.; Orlov, Yu.I.; Permyakov, V.A.

TITLE: Boundary conditions at the surface of a plasma with rapidly changing parameters

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.8, 1964, 1341-1344

TOPIC TAGS: plasma, plasma boundary layer, inhomogeneous plasma, plasma wave propagation

ABSTRACT: The authors discuss the boundary conditions for a plane electromagnetic, wave obliquely incident from the vacuum onto the plane surface of a plasma in which the electron concentration is proportional to the distance from the surface and the collision frequency is independent of position. Under these conditions the gradient of the dielectric constant is a complex function, α , of well-known form of the wave frequency, the collision frequency, and the electron concentration gradient. Maxwell's equations are solved for plane waves incident on the boundary at an arbitrary angle, and the ratio of the electric to the magnetic field components in the boundary plane is calculated for two states of polarization of the incident wave:

1/2

ACCESSION NR: AP4042916

with the electric vector, or with the magnetic vector parallel to the boundary. It is found that for sufficiently small values of k/a (k is the wave number of the incident wave in vacuo), this impedance is the same for both polarization states, is independent of the angle of incidence, and is proportional to $(k/a)^{1/3}$. For larger values of this parameter, higher order terms become important and the impedance varies with the angle of incidence and the state of polarization. The impedance was calculated for several angles of incidence onto a plasma in which the collision frequency is zero, of waves with the electric vector parallel to the boundary, and the results are presented graphically. Ostensibly the defined boundary conditions can be extended to other than plane waves and to slightly curved boundaries. Orig.art. has: 14 formulas and 2 figures.

ASSOCIATION: Moskovskiy ordena Lenina energeticheskiy institut (Moscow "Order of Lenin" Power Engineering Institute)

SUBMITTED: 08Jul63

ENCL: 00

SUB CODE: ME,EM

REF ID: A65001

OTHER: 000

2/2

PARDYAKOV, V.A.; SLAVGORODSKIY, M.V.

Operation of coke ovens of the PK-2K system without recirculation.
Koks i khim. no.5:29-30 '56. (MLBA 9:10)
(Coke ovens)

YELIZAROV, D.P., kandidat tekhnicheskikh nauk; PERMYAKOV, V.A., kandidat
tekhnicheskikh nauk.

Investigation of bubbling in deaerators. Trudy MEI no.25:143-155
'55. (Feed-water purification) (MIRA 9:7)

VASIL'YEV, Ye.N.; ORLOV, Yu.I.; PERMIKOV, V.A.

Boundary conditions on the surfaces of a plasma with alternating changing parameters. Zurn. v. zav. fiz. 3, no. 2, p. 111-114. 1964.
(MIA 175)

I. Moskovskiy criteria Leningrad: Izdat. MGU, 1964.

PERMYAKOV, V. A. (Aspirant)

"An Investigation of the Use of Steam Bubbling in Thermal Desaturators." Cand Tech
Sci, Moscow Order of Lenin Power Engineering Inst imeni V. M. Molotov, 28 Dec 54.
(VM, 14 Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational
Institutions (12)

SO: SUM No. 556, 24 Jun 55